
INTEROFFICE MEMORANDUM

TO: MEMBERS, STATE BOARD OF EDUCATION
FROM: ROBERT FRANCIOSI, DEPUTY ASSOCIATE SUPERINTENDENT,
RESEARCH AND EVALUATION
SUBJECT: AZ LEARNS EVALUATIONS FOR K-2 SCHOOLS
DATE: JULY 31, 2006

This memo proposes a new scale for AZ LEARNS performance levels for K-2 schools. This change is necessary because Arizona has changed the norm-referenced test (NRT) given to second graders. Since AIMS is not given below grade 3, an alternate method for determining AZ LEARNS profiles for K-2 schools was developed and approved in 2004. This method uses scores from the state's norm-referenced test that is given in grades 2 through 9. In 2004, the norm-referenced test given by the state was the Stanford 9. In 2005, the state started administering a new NRT, the TerraNova. Consequently, a new scale is necessary that reflects performance on the new test

AZ LEARNS FOR K-2 SCHOOLS

The method of calculating the profile for K-2 schools is straightforward:

1. The average percentile ranks on the reading and math portions of the second grade NRT are calculated for the most current year for a school's second graders.
2. The average percentile ranks for the school are added together, and
3. Compared to a scale to determine the school's label.

The table below provides the scale used for the past two years.

AZ LEARNS Scale for K-2 Schools	
Points	Achievement Profile
<68	Underperforming
68	Performing
130	Highly Performing
150	Excelling

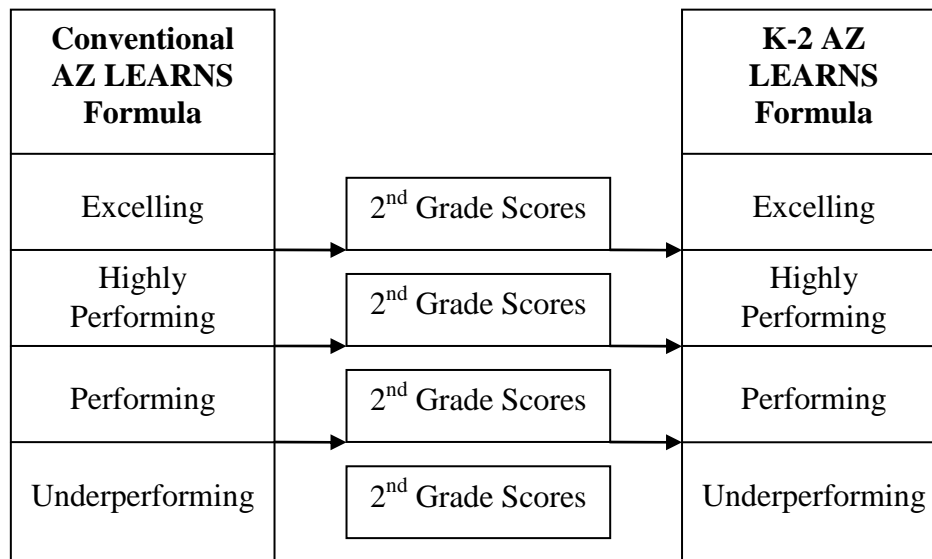
Example. In 2004, the average percentile rank for second graders in Gila Monster Elementary was 52 for math and 48 for reading. The two averages summed together

yield $52 + 48 = 100$ points. This is sufficient for Gila Monster to be a performing school.

PROPOSED NEW AZ LEARNS SCALE FOR K-2 SCHOOLS

The proposed scale for K-2 schools attempts to set as congruent standard as possible between the AZ LEARNS scale used for K-2 schools and the AZ LEARNS scale used for all schools. To do this ADE looked at the TerraNova scores of second graders in schools that received the standard, AIMS-based AZ LEARNS profile. The scale was then set so that schools would tend to earn the same profile if they were evaluated solely based on second grade that they received in 2005 using the conventional AZ LEARNS methodology. The diagram below shows an outline of the method.

Figure 1. Linking Conventional and K-2 Profiles



The table below gives the thresholds calculated using the method described above. The table shows the K-2 schools in each profile category in 2005; the proposed thresholds; and the schools in each performance category using the proposed thresholds.

Proposed AZ LEARNS Scale for K-2 Schools			
	# schools 2005	Proposed Thresholds	# of schools with proposed thresholds
Underperforming	4	<70	3
Performing	10	70	9
Highly Performing	4	97	3
Excelling	2	106	4

We are also proposing to change the methodology slightly by expressing all calculations and cutpoints as normal curve equivalents (NCE) rather than as percentile ranks. The NCE converts percentile ranks to a standard scale that allows you to do simple math operations. For example, it is not valid to take a percentile rank of 80 and a percentile rank of 90 and declare the average is 85. To find the average, one must convert the percentile ranks to NCEs, average the NCEs, and then convert the result back into a percentile rank. Doing the profiles calculations as NCEs saves extra steps.